

neurons themselves. The blood-brain barrier has now been further clarified by demonstrating the highly specialized function of transport, and exclusion of molecules, including ions, but the special structure and function of cellular membranes of the special cellular elements of the nervous system, particularly the neuron and the astrocytes. The variable degree of permeability and impermeability of cell membranes in relation to pinocytosis and phagocytosis, as well as the manner in which certain viruses can adapt themselves to the invasion of the special membranes of neuronal elements, has been an important neurobiological advance in our understanding of the pathogenesis of the so-called "neurotropic" viruses, particularly in relation to release of viral DNA into host cells. The electronmicroscopic study of myelin has clarified its formation from the cell membrane and cytoplasm of Schwann cells of peripheral nerves and oligodendrocytes of the CNS.

Though this monograph on the properties of membranes of the nervous system seems remote from the diagnosis and treatment of neurological disorders, such investigations are laying the groundwork for further clarification of the etiology and pathogenesis of disorders of the nervous system, a specialty in medicine where ignorance continues to outweigh knowledge.

KNOX FINLEY, M.D.

ILLUSTRATED MANUAL OF NEUROLOGIC DIAGNOSIS—R. Douglas Collins, M.D., Captain, USAF, MC, Neurologist, 7505th USAF Hospital R.A.F. Burderop, Wiltshire, England; former special trainee for the National Institute of Neurological Diseases and Blindness, Jefferson Medical College Hospital, Philadelphia. With a Foreword by Rudolph Jaeger, M.D., Professor and Chief, Department of Neurological Surgery, Jefferson Medical College and Hospital, Philadelphia. J. B. Lippincott Company, East Washington Square, Philadelphia 5, Pa., 1962. 177 pages, 97 illustrations of Neurologic Diseases, \$12.00.

Dr. Collins' goal was to present a simplified technique for the average physician to suspect neurologic disease. Within the limits of the complexity of the subject, the author is well on his way to accomplishing his aim in a brief, readable if somewhat oversimplified format. The essential neuroanatomy around which neurologic localization is built is portrayed in semi-diagrammatic colored plates conveniently coded. The basic principle of establishing the location of the lesion and then its nature is followed in the organization.

A visual recapitulation of the steps in the neurological examination is offered initially and the author has given at least one established approach to the elicitation and interpretation of each important neurologic sign. There follows a simple tabulation of abnormal findings which would be associated with disease in the various anatomical sites of the neuraxis, first in the longitudinal and then in the transverse dimension. In this category little attention is given to cervical spine or cervical vessel findings or the abnormalities of pediatric neurology or the deformations observed in the spine and extremities or about the orbits.

In the tabulation it is difficult to give emphasis to the relative importance of the various signs which are elicited. A tabulation of the possible pathologic changes to be found in association with disease in specific anatomical sites or systems is presented. A list of the various laboratory diagnostic procedures and their indications is useful. A central 100 pages of the book are devoted to a presentation of examples of disease entities involving one or more portions of the neuraxis.

A most elementary protocol of a case and the differential diagnosis is presented together with the visual display of the location of the disease. No inclusion of pathologic details or therapy is attempted. Details are not to be found in this book. No processes are described comprehensively.

The author provides a brief list of general neurologic reference texts to which the physician may refer. A summary of the parts of the body which require examination and the features to look for in the examination of that particular part is appended as is a breakdown of the signs which may be interpreted as involving one or multiple tracts or specific systems above and below the foramen magnum.

A brief glossary to terms which might be unfamiliar is included and a reasonable index completes the volume. The general approach is one of making easy, in almost cookbook fashion, the elicitation and interpretation of abnormal findings without any attempt to discuss disease as such. Little or no emphasis is placed upon the history or the tempo of the disease. In the glossary the reader will not find a careful breakdown of the important terms applied to impairment of consciousness and one finds the term "semi-conscious" appear within the book.

One might argue with utilization of the term "platybasia" as opposed to "basilar invagination" or "basilar impression" as being responsible for one of the neurologic syndromes which is presented. These critical points merely appear as a result of the laudable attempt to put into a short book and in the most elementary form the essentials of the field such that the average physician may have a workable skeleton upon which to build his assessment of his patient's problem. The diagrams are well presented, if not detailed. The print is most readable. The book is beautifully produced. The cost is explained in part by the numerous color plates. This is a book for the student of elementary neurology, nothing more.

W. EUGENE STERN, M.D.

FUNDAMENTAL SKILLS IN SURGERY—Thomas F. Nealon, Jr., M.D., Associate Professor of Surgery, Jefferson Medical College. Illustrated by Ellen Cole. W. B. Saunders Company, West Washington Square, Philadelphia 5, Pa., 1962. 289 pages, \$8.50.

The conscientious interne or junior resident who has just received a surgical service assignment, faces his new position with a certain amount of fear, apprehension and confusion. This book is written with this chap in mind; to guide him in fundamentals which he later will do automatically. It is strictly a Primer for the embryo surgeon, which is the author's intent, and which makes it an entirely different text book. The twenty-two chapters are well illustrated and concise giving information regards routine surgical care, surgical instruments, operating room conduct, sutures, dressings and anesthesia, infection, burns, minor surgery of superficial tissues and gastrointestinal intubation. Problems which the embryo surgeon may encounter and which he may have to be prepared to deal with "on his own" are reviewed in separate chapters on head and neck, upper extremity, breast, chest, abdomen, anorectal region, lower extremity and urinary tract, with one on infants and children. A separate chapter on resuscitation and one on the circulatory system including fluid and electrolyte therapy completes the review.

The seasoned surgical resident will of course consider this book as too elementary, but the fledgling who has not yet attained such exalted position, will welcome the helping hand which this book affords. The author covers about everything which the embryo surgeon might encounter in his surgical service. I would make one suggestion or criticism and that is that the chapter on electrolytes should have been more inclusive of the various problems which may and do so often arise to confuse the whole staff.

CONRAD J. BAUMGARTNER, M.D.